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AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims in this application.

1. (Previously Presented) An infusion source for a ocular surgery having a needle with at least an irrigation lumen comprising:

a fluid supply;

an irrigation line interconnecting said fluid supply and said irrigation lumen; and

a tubular member disposed along said irrigation line and in fluid communication with said irrigation line and said irrigation lumen, said tubular member having an expandable wall configured to expand upon accumulation of fluid within said tubular member during occlusion of an aspiration lumen and enhanced flow of fluid into said irrigation lumen upon clearing of the occlusion.

2. (Original) The infusion source according to claim 1, wherein said tubular member is disposed proximate a handpiece effective for use in a phacoemulsification procedure.

3. (Previously Presented) The infusion source according to claim 1, wherein the tubular member is disposed in serial fluid communication or in parallel fluid communication with said irrigation line and irrigation lumen.

4. (Previously Presented) The infusion source according to claim 2, wherein the tubular member wall is formed from an elastic material.

5. (Original) The infusion source according to claim 1, wherein the tubular member comprises a sheath disposed around the expandable wall.

6. (Withdrawn) The infusion source according to claim 5, wherein said sheath is rigid.

7. (Original) The infusion source according to claim 5, wherein said sheath is flexible.

8. (Withdrawn) The infusion source according to claim 7, wherein said sheath is a mesh.

9. (Original) The infusion source according to claim 7, wherein said sheath and expandable wall are integrally molded.

10. (Original) The infusion source according to claim 9, further comprising a plurality of expandable walls molded in a spaced apart relation within said sheath.

11. (Previously Presented) The infusion source according to claim 10, wherein said expandable walls and said sheath are formed from an elastic material, said expandable walls being relatively thin compared with the thickness of the sheath.

12. (Withdrawn) The infusion source according to claim 11, wherein said sheath is a mesh.

13. (Withdrawn) The infusion source according to claim 1, further comprising a pneumatic access to said expandable wall for controlling expansion and contraction of said expandable wall.

14. (Previously Presented) An infusion source for ocular surgery, said infusion source comprising:

a handpiece having a needle with an irrigation lumen;

a fluid supply;

an irrigation line interconnecting said fluid supply and said irrigation lumen; and

a tubular member disposed along said irrigation line and in fluid communication with said irrigation line and said irrigation lumen, said tubular member having an expandable wall configured to expand upon accumulation of fluid within said tubular member during occlusion of an aspiration lumen and enhanced flow of fluid into said irrigation lumen upon clearing of the occlusion.

15. (Original) The infusion source according to claim 14, wherein said tubular member is disposed proximate the handpiece.

16. (Previously Presented) The infusion source according to claim 14, wherein tubular member is disposed in serial fluid communication or in parallel fluid communication with said irrigation line and irrigation lumen.

17. (Previously Presented) The infusion source according to claim 14, wherein the tubular member wall is formed from an elastic material.

18. (Original) The infusion source according to claim 14, wherein the tubular member comprises a sheath disposed around the expandable wall.

19. (Withdrawn) The infusion source according to claim 18, wherein said sheath is rigid.

20. (Original) The infusion source according to claim 18, wherein said sheath is flexible.

21. (Withdrawn) The infusion source according to claim 20, wherein said sheath is a mesh.

22. (Original) The infusion source according to claim 20, wherein said sheath and expandable wall are integrally molded.

23. (Original) The infusion source according to claim 22, further comprises a plurality of expandable walls molded in a spaced apart relation within said sheath.

24. (Previously Presented) The infusion source according to claim 23, wherein said expandable walls and said sheath are formed from an elastic material, said expandable walls being

relatively thin compared with the thickness of the sheath, and the handpiece is effective for use during a phacoemulsification procedure.

25. (Withdrawn) An infusion source for an ocular surgical handpiece having a needle with an irrigation lumen, the infusion source comprising: a fluid supply; an irrigation line interconnecting said fluid supply and said irrigation lumen; an accumulator disposed in fluid communication with said irrigation line and said irrigation lumen, said accumulator comprising a housing and an expandable bladder therein for enabling accumulation of fluid during occlusion an aspiration lumen and enhanced flow of fluid into said irrigation lumen upon clearing of the occlusion; and pneumatic access to said housing for controlling expansion and contraction of said bladder.

26. (Withdrawn) The infusion source according to claim 25, wherein said bladder includes accordion pleated walls.

27. (Withdrawn) The infusion source according to claim 26 wherein said housing is tubular.

28. (Withdrawn) The infusion source according to claim 24 further including a control system for monitoring aspiration lumen occlusion and controlling pneumatic pressure within said housing in order to control bladder expansion and contraction.

29. (Previously Presented) An ocular surgical system for performing ocular surgery on an eye, comprising:

a handpiece driven by a controller through a power line;

an irrigation lumen;

a fluid supply;

an irrigation line interconnecting said fluid supply and said irrigation lumen; and

a tubular member disposed along said irrigation line and in fluid communication with said irrigation line and said irrigation lumen, said tubular member having an expandable wall configured to expand upon accumulation of fluid within said tubular member during occlusion of an aspiration lumen and enhanced flow of fluid into said irrigation lumen upon clearing of the occlusion.

30. (Previously Presented) The ocular surgical system according to claim 29, wherein said tubular member is disposed proximate the handpiece.

31. (Previously Presented) The ocular surgical system according to claim 29, wherein said tubular member is disposed in serial fluid communication or in parallel fluid communication with said irrigation line and irrigation lumen.

32. (Previously Presented) The ocular surgical system according to claim 29, wherein the tubular member wall is formed from an elastic material.

33. (Previously Presented) The ocular surgical system according to claim 29, wherein the tubular member comprises a sheath disposed around the expandable wall.

34. (Withdrawn) The ocular surgical system according to claim 33, wherein said sheath is rigid.

35. (Previously Presented) The ocular surgical system according to claim 33, wherein said sheath is flexible.

36. (Withdrawn) The ocular surgical system according to claim 35, wherein said sheath is a mesh.

37. (Previously Presented) The ocular surgical system according to claim 35, wherein said sheath and expandable wall are integrally molded.

38. (Previously Presented) The ocular surgical system according to claim 37, further comprises a plurality of expandable walls molded in a spaced apart relation within said sheath.

39. (Previously Presented) The ocular surgical system according to claim 38, wherein said expandable walls and said sheath are formed from an elastic material, said expandable walls being relatively thin compared with the thickness of the sheath.

40. (Withdrawn) The ocular surgical system according to claim 39, further comprising a pneumatic access to said expandable wall for controlling expansion and contraction of said expandable wall.

41. (Previously Presented) An accumulator for an ocular surgical handpiece, comprising:

a tubular portion comprising an expandable elastic wall; and

a sheath disposed around the expandable elastic wall;

the accumulator configured ~~for enabling~~ to expand upon accumulation of fluid within the tubular member during occlusion of an aspiration lumen and to enhanced the flow of fluid into an ocular surgical handpiece upon clearing of the occlusion.

42. (Previously Presented) The accumulator of claim 41, wherein the sheath and the expandable wall are integrally molded.